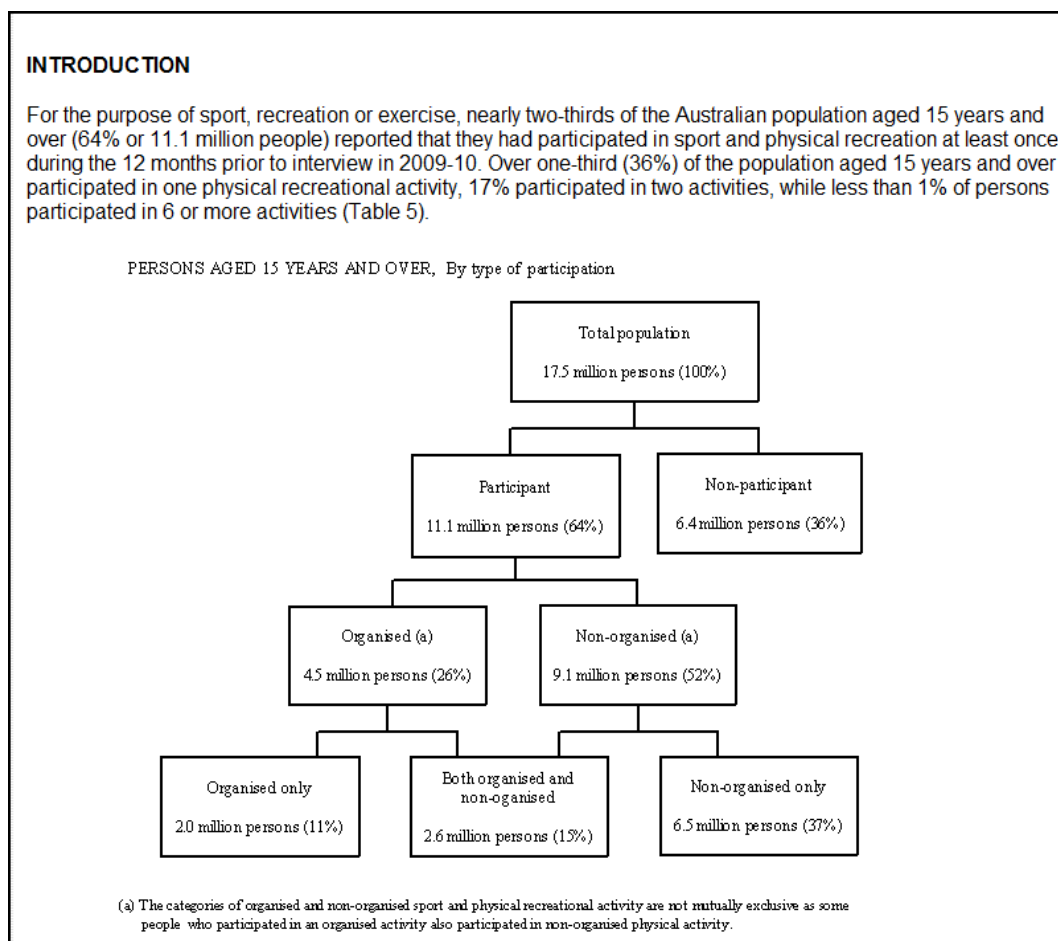


Australian's Participation in Sport

Data collected by the ABS is organised by Topic or by catalogue number where similar types of data are grouped together. Social Statistics such as Health and Education are found in the 4000s. Amongst these is found "Participation in Sport and Physical Recreation, Australia".

The following excerpt shows a breakdown of the participation in sport 2009 -10.



Source: Participation in Sport and Physical Recreation, Australia, 2009-10, cat. no. 4177.0

November 17, 1999

More Australians are participating in organised sport and physical activity, according to figures released today by the Australian Bureau of Statistics.

Almost a third (30.3%) of people aged 18 years and over participated in a sport or physical activity organised by a club or association during the 12 months prior to interview in 1998-99. This is up from 26.5% in 1996-97 and 28.3% in 1997-98.

About three-fifths (59.4%) of all adult Australians participated in a sport or physical activity at least once during the year, whether organised by a club or association or not.

The two top participation activities were walking and swimming. For men, golf was the most popular (15.7% participating) while for women, walking (29.5%) was clearly the most popular activity. For each of these activities, non-organised participation exceeded that of organised participation.

Participation was greater for men (62.6%) than women (56.3%). This was true for all age groups and in all States and Territories.

Age was a key factor in determining whether people undertook sport or physical activity. Participation declined from 80.4% for the 18-24 year age group to 36.8% for those 65 years and over.

Information collected by the ABS is often given out in the form of media releases such as:

October 24, 2000

Proportionally more men (58.5 per cent) than women (50.9 per cent) participated in sport and physical activities, and for both sexes, participation rates had decreased since 1998-99.

Participation was much more likely among younger adults than older adults, with rates ranging from 73.5 per cent for the 18-24 year age group to 33.8 per cent for the 65 years and over age group. A decrease in participation was observed for each of the age groups, with the largest decrease occurring in the 45-54 year age group (48.5 per cent in 1999-2000 compared with 56.4 per cent in 1998-99).

The ten most popular activities undertaken by Australian adults were walking (18.8 per cent participation rate), swimming (13.9 per cent), aerobics/fitness (10.5 per cent), golf (9.6 per cent), tennis (7.4 per cent), fishing (5.3 per cent), cycling (4.9 per cent), running (4.7 per cent), tenpin bowling (2.9 per cent) and netball (2.7 per cent).

Golf was the most popular activity among men (15.6 per cent participating) while walking was clearly favoured by women (23.8 per cent).

In this activity you will look at some of the data from the ABS Publication "Participation in Sports and Physical Recreation, Australia cat. No. 4177.0." This data has been collected for different age groups from 15

years old to 65 years old and over. You will choose suitable ways to display the data and write a newspaper report of your major findings.

Teachers will need to provide copies of the data for students.

The topics are:

- Participation rates by sex (given for various age groups as percentage).
- Participation in Sport 1998 – 2010 selected years (given for various age groups as percentage). *This data set requires extra explanation see Data set 2 page 4 below.*
- Selected activities by age (data for 55 activities in '000s and as percentage).
- Constraints to participation (given for various age group, in '000s and percentage).
- Motivators to participation (given for various age groups, in '000s and percentage).

Task One: Setting up your investigation

1a. Choose your investigation.

Type 1: Age

Focus on 2 distinct age groups and look at the data relating to them from all 5 sets.

OR

Type 2: Participation

Look at two of the data sets and consider all the age groups in the collection.

This will need explanation as data sets are examined.

b. Name your investigation.

Give your investigation a title by first considering a question you want to find the answer to.

E.g. Type 1: Age

What does the data tell us about the differences in sport and physical recreation participation between 15 – 17 year olds and 45 – 54 year olds?

Type 2: Participation

What does the data tell us about how the participation in physical activity changes over time and what factors contribute to these changes?

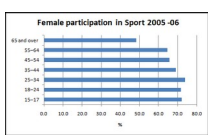
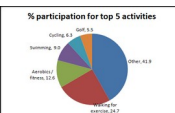
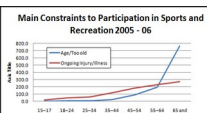
2. Decide on appropriate displays for your data.

Graphs can be an excellent way to turn data into information. Graphs present information in a way which can be quick and easy to understand. Quite often trends or comparisons are better understood in a graphical format.

You need to create a range of displays for your data by selecting at least 3 of the following to include in your report. Different graph types are used to convey different

information. Your decision about what graph to use will depend on the type of investigation you are conducting.

You will also need to consider scale to allow the best view of the data as well as labelling.

Side by side column graph		To compare 2 or more attributes for 2 or more variables e.g. males with females, 15 year olds with 40 year olds.
Horizontal bar graph		A horizontal bar graph is used to compare 2 or more attributes and is a convenient display when the variable names are too long for the x axis.
Pie chart		To show relationship of parts to the whole where the whole pie represents 100% of the data. More than 6 sectors make the chart difficult to read.
Line Graph		To display a relationship between 2 numerical variables, often one of them is time.

Task Two: Considering your results

3. What stories do your graphs tell about the data?

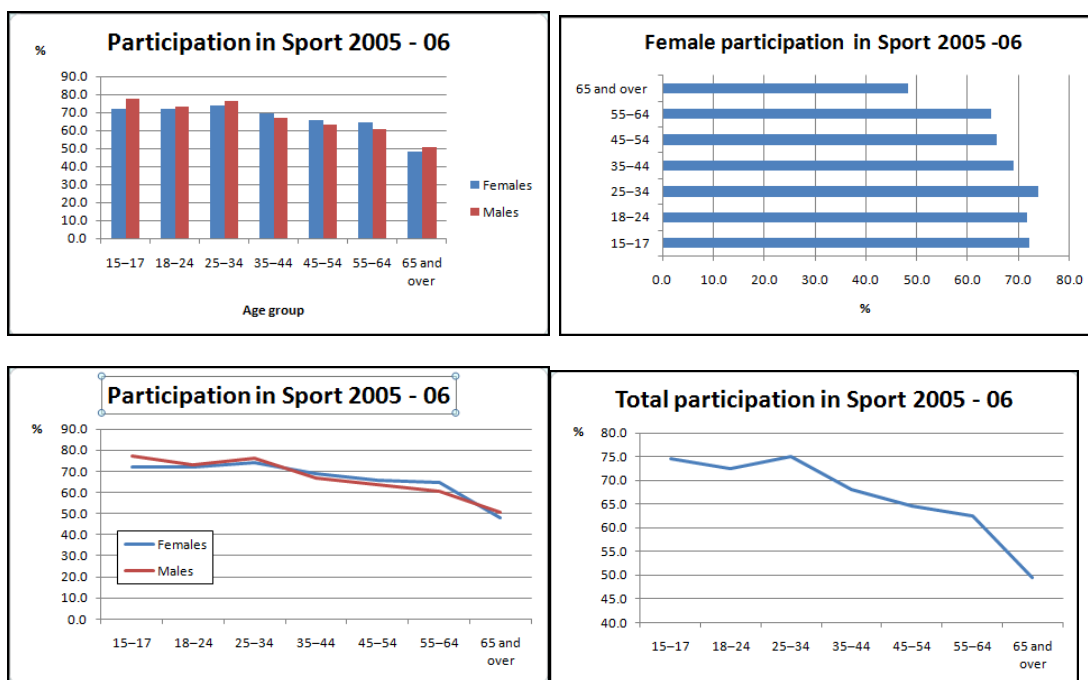
Write a newspaper report of the major findings from your graphs.

- Include a headline and

- Include examples of the graphs as evidence. Use a system of numbering the graphs e.g. **GRAPH 1,2,3** or **FIGURE 1,2,3** and include the source of the data.
- If possible suggest reasons for your results.
- Include how your results could be used in improving the provision of sports and physical recreation services in the future.
- You may wish to include fictional quotes from 'experts' etc to make your report appear more realistic.
- Try and make sure that your article is interesting to read by including interesting or unusual results and varying your sentence construction. Hint: you might get some ideas from the ABS media releases on pages 1 and 2.

Examples of possible graphs from the data sets and major findings.

Data Set 1: Participation rates



Major findings:

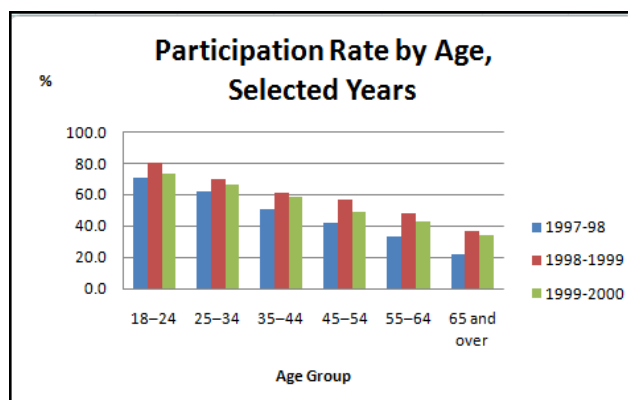
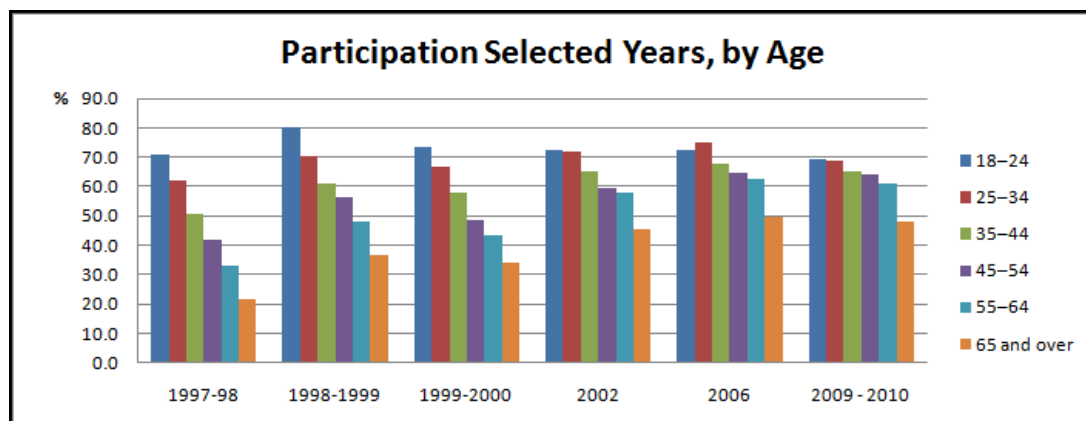
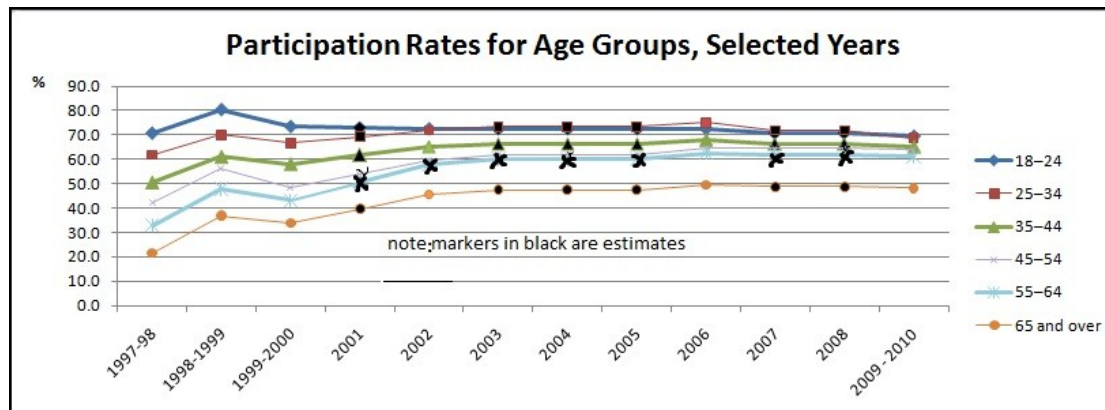
Participation rates in sport and physical recreation generally drops as males and females age. The peak participation age for females is 25 - 34 and for males is 15 - 17.

Data Set 2: Participation in Sport 1998 - 2010

Note the difficulties with this data, namely no data for 15-17 until 2005, the use of different labelling cf 1999-2000 with 2006 and the lack of data for 2001, 2003 - 05 and 2007 - 08. Ways to deal with these discrepancies

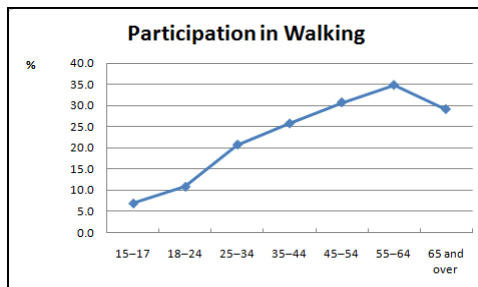
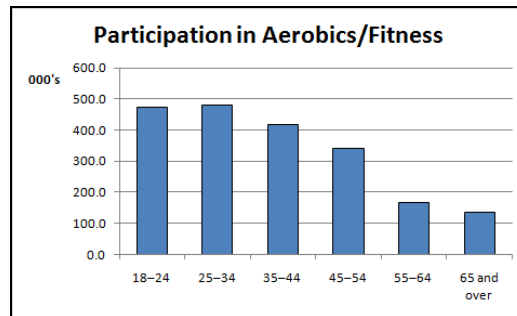
need to be discussed with the students once they are familiar with the data as well as reasons for doing so and implications of doing nothing.

In the following line graph, data for 15 – 17 year olds has been omitted (too little data). It would be possible to add the 15 – 17 year old data to the 18 – 24 year old data to make equal increments with the other age groups. The discrepancy in the labeling of the collection years has been ignored and to reduce distortion of any trends, data for missing years has been estimated by taking the mean value and entered in black.



*Major findings:
Participation rates drop as people age.
Overall participation rates have increased for most age groups. In contrast, participation of 18 – 24 year olds has remained relatively stable with a peak in 1998 – 1999.*

Data Set 3: Selected Activities

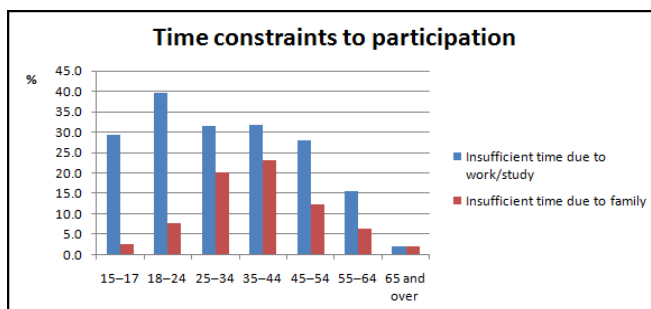
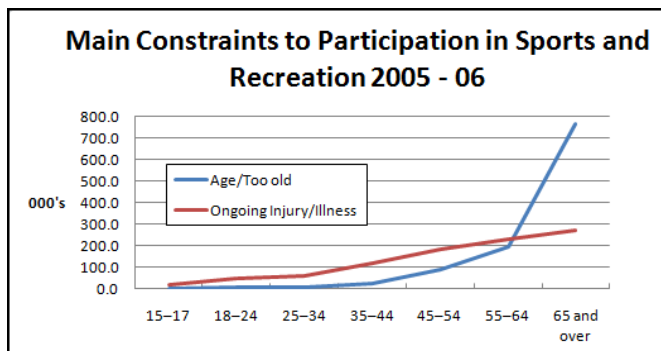


Major findings:

Walking for exercise is the most popular physical activity, followed by aerobics/fitness, swimming, cycling and golf.

Participation rates for walking increased from 7% for 15 - 18 year olds to 35% for 55 - 64 year olds then dropped to 29% for people 65 and over. Aerobic/Fitness participation tended to drop as people age.

Data set 4: Constraints to participation



Major findings:

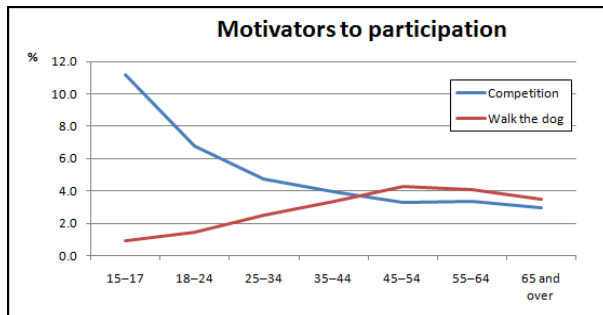
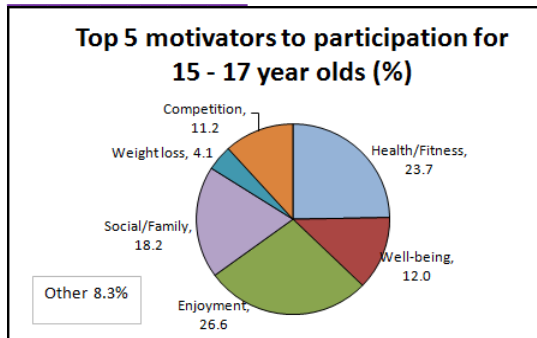
As expected the constraint of age increases as people get older with a sharp increase in people over 55. The constraint of ongoing injury/illness also increases.

The constraint of lack of time due to work and study decreases after a peak in the 18 - 24 age group.

The constraint of lack of time due to family increases steadily to a

The motivator of competition was highest amongst the 15 - 17 age group and it decreases as people age from that point. The motivator of walking the dog steadily increases until people reach the 45 - 54 age group and then decreases beyond that.

Data set 5: Motivators to participation



Teacher Note: The rubric for this activity shows the value for the inclusions in this investigation and will need to be discussed with the students once they become familiar with the data and the task.